

REMARKS

This application was originally filed on 11 August 2000 with three claims, three of which were written in independent form. No claims have been allowed.

Claims 1 and 2 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Patent No. 6,151,011 to Worley III et al. ("Worley"), in view of U.S. Patent No. 6,043,801 to Bassetti ("Bassetti"). The applicant respectfully disagrees.

The Examiner stated, Worley describes "displaying the first image data bit during some, but not all, of said refresh periods; and displaying second image data bit during more of said refresh periods than first image data bit was displayed during (column 3, lines 22-29)." The applicant respectfully submits this is a mischaracterization of Worley. The passage cited by the Examiner states, "Thus, each bit of the first group is asserted for a time period equal to the time period that the other bits of the first group are asserted, and each bit of the second group is asserted for a time period different than the other bits of the second group. In a particular embodiment, the length of each coequal time period is twice as long as the time period associated with the most significant bit of the second group of data bits."

The Examiner further stated, "However, Worley never accounted for dividing the image frame period into at least two refresh periods. Bassetti explained in his invention the concept of temporal integration techniques, splitting the frame into at least two refresh periods is a common practice in the art (column 4, lines 12-16). It would have been obvious to one skilled in the art to combine temporal integration along with Worley invention in order to further reduce flickering."

The applicant respectfully submits this is a mischaracterization of Worley. The passage cited by the Examiner states, "So far temporal integration techniques which employ time-averaging (PWM, FRC) and spatial integration techniques, such as error diffusion and ordered dithering, have been discussed. Another technique used for years on home TV sets to reduce flicker is interlacing, which takes advantage of both temporal and spatial integration features at the same time."

Worley combined with Bassetti does not show, teach or suggest "dividing an image frame period into at least two refresh periods; displaying said first image data bit during some, but not all, of said refresh periods; and displaying said second image data bit during more of said refresh

periods than said first image data bit was displayed during" as recited by Claim 1.

The Examiner similarly mischaracterizes Worley and Bassetti with respect to Claim 2. The Examiner has not cited any passages in Worley and Bassetti that show, teach, or suggest "dividing a frame period into at least two refresh periods; allocating a display period to each image data bit in an m-bit image data word; determining the a minimum temporal frequency for each of said image data bits, said minimum temporal frequency necessary to prevent each said image data bit from appearing to flicker; and displaying each said image data bit in enough of said refresh periods to achieve said minimum temporal frequency, wherein not all of said image data bits are displayed in all of said refresh periods" as recited by Claim 2.

Claim 3 was rejected under 35 U.S.C. § 103 (a) as being unpatentable over Worley in view of Bassetti in further view U.S. Patent 6,061,049 to Pettit et al. ("Pettit"). The applicant respectfully disagrees.

The Examiner stated, "Worley describes a system that resembles the one being claimed but fails to disclose a display device in electrical communication with the controller, the display device for providing a modulated light beam to each of an array of image pixels, the modulation in response to processed image data from the controller. This limitation is obvious if not inherent to the invention being claimed." The applicant respectfully submits the Examiner has not pointed to any teaching in Worley, Bassetti, or Pettit that fairly shows, teaches, or suggests, "said processing allocating a series of refresh periods to said image bits such that not all of said image bits are displayed in the same number of said refresh periods" as recited by Claim 3.

"To support the conclusion that the claimed combination is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed combination or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. & Inter. 1985).

The Examiner has the duty to present a prima facie obviousness rejection. The Examiner has not pointed to any teaching in the prior art suggesting the combination proposed by the Examiner. Instead, the Examiner merely make various conclusory statements, such as "It would have been obvious to one skilled in the art to combine temporal integration along with Worley

invention in order to further reduce flickering," "it would have been obvious to display each image data bit in enough of the refresh periods to achieve minimum temporal frequency, wherein not all of such image data bits are displayed in all of the refresh periods, a idea that is inherit to the concept to temporal integration," and "It would have been obvious to one skilled in the art to integrate the display device in such a fashion in order to display the desired image." Such a conclusory statements fail to show an express or implied suggestion in the art, and does not provide any line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references as required by Ex Parte Clapp.

For the reasons stated above, the Examiner has not met the burden of presenting a prima facie case of obviousness. Therefore, the rejection under 35 U.S.C. § 103(a) is defective and should be withdrawn.

In view of the amendments and the remarks presented herewith, it is believed that the claims currently in the application accord with the requirements of 35 U.S.C. § 112 and are allowable over the prior art of record. Therefore, it is urged that the pending claims are in condition for allowance. Reconsideration of the present application is respectfully requested.

Respectfully submitted,



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